PUC “Packages” for DG/CHP

Lessons from MA and NY

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(with much help from Tim Daniels)

Creating Value from Steam Pressure

Trends in electricity market deregulation

1990s: Wholesale	2000s: Retail
• Customer chooses supplier	• Customer chooses make vs. buy
• Power-export	• Behind-the-fence
• Typical plant = merchant station	• Typical plant = on-site CHP
• Use CHP to meet PURPA	• Use CHP to enhance economics
• For grid planning purposes, similar to central power	• For grid planning purposes, similar to DSM
• PURPA for must-buy	• PURPA for 3rd party kWh sales
• **Necessary regulatory changes driven from the federal level**	• **Necessary regulatory changes driven from the PUC level**

These retail-level impacts represent both the largest opportunity…

Opportunities unique to Retail-level Competition

- Maximum impact on electric-users' bottom line
  - *Earn 8 cent retail displacement rather than 2 cent wholesale sale*
- Maximum positive impact on system reliability
  - *Many small local CHP plants vs. few large central CHP plants*
- Maximum positive impact on environment
  - *Local CHP designed for higher efficiency than PURPA-chasing merchants*

…and the largest regulatory challenge

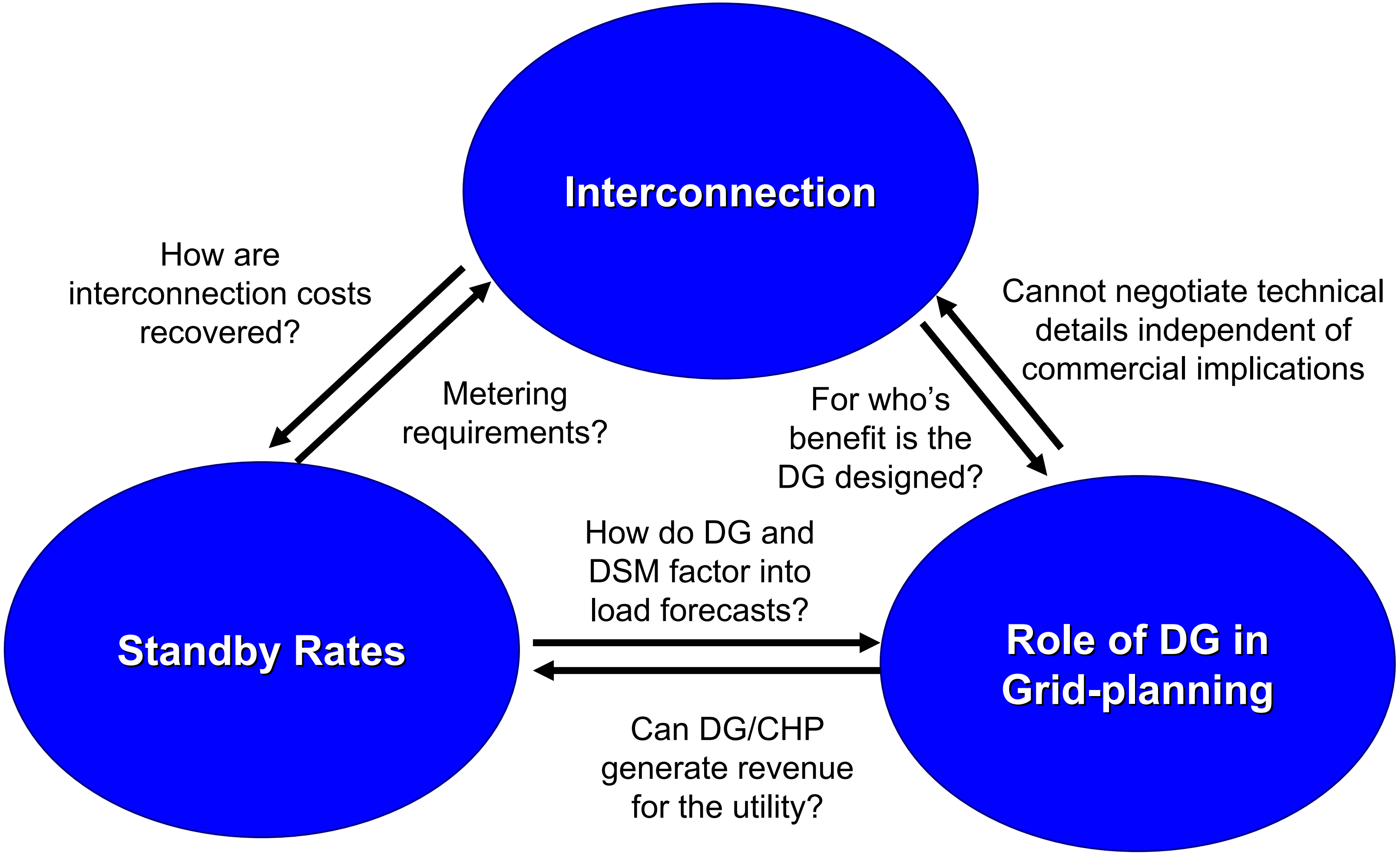
Regulatory challenges unique to Retail-level Competition

- Direct confrontation to "Last-mile", "natural monopoly" issues
  - *DisCo much harder to deregulate than GenCo + TransCo*

- Exaggerates inequity of resources
  - *<u>Wholesale</u>: CHP represented by IPPs with relatively deep pockets, big $ riding on any individual project*
  - *<u>Retail</u>: CHP represented by manufacturers and/or non-energy industrials with relatively shallow pockets, few $ riding on any individual project*

- Challenges in some cases confounded by wholesale dereg
  - *If utilities aren't allowed to own generation, what's in it for them?*

Breaking through these challenges requires PUCs to address three issues simultaneously



Massachusetts and New York are both working through these issues, with illuminating differences between each.

	New York	Massachusetts
Interconnect	• 1999 std for < 300 kVA • New std in development **C / INC**	• 2001 std modeled on CA-style technical screens **B+**
Standby (Electric and Gas)	• NiMo rate (bad) • Generic rate (good) • Generic gas rates (good) **B+**	• NSTAR rate (very bad) • No generic rulings, 02-38 uncertainty **F**
Role of DG in Grid-planning	• Investigation of utility disincentives for DG • Evolving PSC "encouraged" pilot programs **B+**	• DTE 02-38, "Role of DG in distribution planning" starting **INC**
Overall Grade	• **A** • Leads all other states in introduction of competition into electric regulations • PSC, led by Bill Flynn is pro-CHP and proactive	• **C** • To the extent there is a DG policy, it is idealistic rather than realistic (pro PV, neutral-to-negative towards CHP) • No leadership from DTE

Lessons / recommendations from MA + NY

- Need proactive leadership at the PUC level to effect change
  - Include technical competence and political will to question utility assertions
- Proceedings must be generic, applicable to all state utilities
  - Cannot address questions of policy in the context of specific rate filings
- PUC needs to address inequity of resources to enable full and fair proceedings
- Proceedings on all issues ideally developed as part of a coherent DG strategy rather than on a piecemeal basis
  - Include non-PSC jurisdiction issues in the blueprint (emissions stds, etc.)
- Commercial terms are as or more important than technical
- DG must maintain united negotiating position, inclusive of big CHP, small PV and everything in between, but cannot rely on other DG/energy efficiency advocates to support our interests.